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NASA Procedural Requirements

COMPLIANCE IS MANDATORY**NPR 8553.1A**Effective Date: March 22,
2005Expiration Date: March 22,
2010[Printable Format \(PDF\)](#)**Subject: NASA Environmental Management System (EMS) w/Change 2 (04/26/2006)****Responsible Office: Environmental Management Division**

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Appendix A: Summary of Roles and Responsibilities Matrix

A.1 Headquarters Responsibilities

- a. The NASA Operations Council is responsible for -
 - 1. Periodically reviewing the NASA EMS for status and viability (paragraph 6.2.1).
- b. Environmental and Energy Management Board is responsible for --
 - 1. Advising the NASA Operations Council on Agency and Headquarters objectives and targets (paragraph 3.3.2.1).
 - 2. Periodically reviewing and advising the NASA Operations Council on the status and viability of the NASA EMS (paragraph 6.2.2).
 - 3. For establishing (in consultation with NASA Headquarters Environmental Management Division) metrics: for evaluating NASA's attainment of its overall environmental objectives and for evaluating the status and viability of the EMS (paragraph 7.2.1).
- c. The Assistant Administrator for Infrastructure, Management and Headquarters Operations, as the senior Agency official responsible for providing executive and functional leadership for environmental management, is responsible for--
 - 1. Ensuring that the Headquarters EMS Representative has the responsibilities and authority needed to implement and maintain the Headquarters EMS across Mission Directorates and Mission Support Offices (paragraph 1.1.a.1).
 - 2. Periodically reviewing the Headquarters EMS for status and viability, and leading the assessment, analysis, and preparation of environmental matters to be considered by the NASA Operations Council (paragraph 1.1.a.2).
 - 3. Monitoring implementation of recommendations of the NASA Operations Council related to the Headquarters EMS across Mission Directorates and Mission Support Offices (paragraph 1.1.a.3).
 - 4.) Self-declaration of the Headquarters EMS or participation in an external EMS recognition program and when applicable, making an annual EMS self-declaration that the Headquarters EMS conforms to applicable requirements of this NPR, is in place, and is viable. (paragraphs 1.1.a.4 and 6.2.4.b).
- d. The role of the NASA Headquarters Environmental Management Division is to --
 - 1. Implement applicable requirements of NPD 1000.3, The NASA Organization, related to Agencywide

environmental issues and initiatives, and NPD 8500.1, NASA Environmental Management (paragraph 1.1).

e. NASA Headquarters Environmental Management Division is responsible for --

1. Establishing and maintaining NASA environmental policy, requirements, and guidance (paragraphs 1.1.b.1 and 3.4.2.1).
2. Defining and maintaining NPR 8553.1, NASA Environmental Management System (paragraph 1.1.b.2).
3. Establishing and maintaining guidance on the NASA Environmental Management System (paragraph 1.1.b.3).
4. Providing guidance on independent self-declaration assessments (paragraph 1.1.b.4).
5. Establishing and maintaining guidance on participation in external EMS recognition programs (paragraph 1.1.b.5).
6. Establishing NASA EMS priority environmental aspect risk criteria (paragraph 3.1.2.1.a).
7. Defining the scope of the NASA EMS and supporting the definition of the scope of the Headquarters EMS (paragraph 3.1.2.1.b).
8. Collection and review of environmental information from Centers and providing an overview and recommendations to the Mission Directorates and Mission Support Offices, as appropriate, for use in the Headquarters EMS (paragraph 3.2.1.c).
9. Evaluating Federal and State statutes, regulations, ordinances, and Executive orders that might apply to NASA locations (paragraph 3.2.2.1.a).
10. Regularly updating information on Federal and State statutes, regulations, and Executive orders (paragraph 3.2.2.2.b).
11. Ensuring that legal requirements information is communicated in a timely manner to the appropriate NASA Centers, Mission Directorates and Mission Support Offices (paragraph 3.2.2.1.c).
12. Evaluating NASAwide agreements and commitments (paragraph 3.2.2.1.d).
13.) Consulting with the Office of General Counsel, as appropriate, in fulfilling responsibilities under Chapter 3.2 (paragraph 3.2.2.1.e).
14. Developing and maintaining Headquarters and Agency level environmental objectives and targets in support of NASA environmental policy (paragraph 3.3.2.2).
15. Periodically assessing, reviewing, and reporting on the condition of the NASA EMS (paragraph 4.1.2.1.a).
16. Seeking continual improvement opportunities for the NASA EMS (paragraph 4.1.2.1.b).
17. Providing guidance and support for the Headquarters EMS (paragraph 4.1.2.1.c).
18. Establishing and maintaining NASAwide EMS documentation (paragraph 4.4.2.1).
19. Providing guidance on Center-led internal annual EMS reviews of conformance with this NPR's requirements and EMS performance (paragraph 5.4.2.1.a).
20. Establishing oversight and evaluation of Center operations through EMS audits, performance metrics, or other means to ascertain that appropriate environmental, compliance, and management techniques are used (paragraph 5.4.2.1.b).
21. Providing functional oversight and conducting environmental functional reviews to ensure that environmental activities are conducted in accordance with statutory, regulatory, and fiduciary responsibilities including the requirements of this NPR (paragraph 5.4.2.1.c).
22. Establishing and maintaining programs and procedures for environmental functional reviews (paragraph 5.4.2.1.d).
23. Establishing and maintaining the NASA Environmental Management System Checklist (paragraph 5.4.2.1.e).
24. Reporting to the Environmental and Energy Management Board on the results of the environmental functional reviews and on the status and viability of the NASA EMS (paragraph 6.2.3.a).
25. Establishing and documenting the management review (paragraph 6.2.3.b).
26. In consultation with the Environmental and Energy Management Board, establishing metrics for: evaluating NASA's attainment of its overall environmental objectives and for evaluating the status and viability of the EMS (paragraphs 7.2.1.a and 7.2.1.b).
27. Reporting metrics through the Environmental and Energy Management Board, NASA Operations Council, GPRA process, or other means as established by the Environmental and Energy Management Board (paragraph 7.2.2).

f. NASA Mission Directorates and Mission Support Offices are responsible for --

1. Applying steps a. through d. in Chapter 3.1.2.3, as appropriate, to the activities, products, and services, e.g., grants, of the Mission Directorate or Mission Support Office, within the scope of the Headquarters EMS (paragraph 3.1.2.2.a).
2. Reviewing environmental information provided by Centers and, where appropriate, considering environmental impact categories and environmental aspect risk criteria to define Headquarters high priority environmental aspects (paragraph 3.1.2.2.b).
3. Working with Headquarters Environmental Management Division to define the scope of the Headquarters EMS (paragraph 3.1.2.2.c).
4. Ensuring that program and project specific legal and other requirements are considered as appropriate within the Mission Directorate or Mission Support Office (paragraph 3.2.2.2.a).
5. Ensuring applicable legal and other requirements are available to appropriate individuals within the Mission Directorate or Mission Support Office (paragraph 3.2.2.2.b).
6. Establishing and documenting, as appropriate, Mission Directorate, Mission Support Office or Center level objectives and targets within the limits of their authority (paragraph 3.2.2.3).
7. Establishing and maintaining new and/or revised documented EMPs within the limits of their authority (paragraph 3.4.2.2).
8. Determining the EMS requirements applicable to the Mission Directorate or Mission Support Office (paragraph 4.1.2.2.a).
9. Allocating resources for the effective operation and maintenance of the EMS (paragraph 4.1.2.2.b).
10. Establishing, implementing, and maintaining EMS requirements (paragraph 4.1.2.2.c).
11. Periodically assessing, reviewing, and reporting on the condition of the EMS (paragraph 4.1.2.2.d).
12. Ensuring that all employees are aware of the existence of the environmental policy and its applicability to their work (paragraph 4.2.2.2).
13. Internal communication at various organizational levels, including Centers (paragraph 4.3.2.1.a).
14. Following existing communications procedures (or create new procedures as necessary) in communicating with internal and external parties (paragraph 4.3.2.1.b).
15. Operational controls and operational control procedures associated with Headquarters high priority environmental aspects (paragraph 4.5.2.1.a).
16. Operational controls to prevent associated Headquarters environmental aspects from becoming Headquarters high priority environmental aspects (paragraph 4.5.2.1.b).
17. As appropriate, establishing and maintaining documented procedures to track, monitor, and measure the key characteristics of operations associated with EMS objectives and targets and associated with Headquarters high priority environmental aspects (paragraph 5.1.2.1).

A.2 Center Responsibilities

a. Center Directors are responsible for --

1. Implementing NASA Environmental Policy and Requirements (paragraph 1.1.c.1).
2. Defining the scope of the Center EMS (paragraph 1.1.c.2).
3. As applicable, delegating Component Facility environmental management responsibilities to an appropriate Component Facility NASA Authority and optionally designating an individual to assume Center Director responsibilities for the EMS at Component Facilities (paragraph 1.1.c.3).
4. Assigning roles and responsibilities for the Center EMS Representative (paragraph 1.1.c.4).
5. Providing the authority needed for the EMS Representative to implement and maintain the Center EMS (paragraph 1.1.c.5).
6. Providing resources for the effective operation and maintenance of the Center EMS (paragraph 1.1.c.6).
7. Periodically reviewing the Center EMS for status and viability (paragraphs 1.1.c.7 and 6.2.4.a).
8. Self-declaration of the Center EMS or participation in an external EMS recognition program no later than December 31, 2005 and when applicable, making an annual EMS self-declaration that the Center EMS conforms to applicable requirements of this NPR, is in place, and is viable (paragraphs 1.1.c.8 and 6.2.4.b).
9. Reporting to NASA Headquarters Environmental Management Division on EMS progress and metrics as requested (paragraph 1.1.c.9).

d. The Component Facility NASA Authority shall be responsible for --

1. Implementation of an EMS commensurate with the environmental responsibilities delegated by the Center Director. The Component Facility EMS may be separate from the Center EMS (paragraph 1.1.e).

c. NASA officials responsible for the contract at a NASA-owned, contractor-operated facility -

1. Incorporate a requirement for implementing an EMS, if determined appropriate, into the contract no later than the time of the next recompetition of the contract. The requirement shall, at a minimum, be for an EMS that satisfies the EMS-related requirements of Executive Order 13148 (and applicable Federal Acquisition Regulations). If the contractor does not satisfy the above requirement for an EMS, then NASA officials have discretion to specify in the contract the conditions pursuant to which the contractor shall choose and administer an EMS. Such conditions may include restrictions as to the type of acceptable EMS and provisions for appropriate NASA authority control or supervision of the EMS desired by Center management (paragraph 1.1.f).

d. Center EMS Representatives are responsible for --

1. Ensuring the implementation and maintenance of Center EMS requirements (paragraph 4.1.2.4.a).
2. Documenting and communicating roles, responsibilities, and authorities to facilitate effective implementation of the Center EMS (paragraph 4.1.2.4.b).
3. Requesting resources for the effective operation and maintenance of the EMS (paragraph 4.1.2.4.c).
4. Exercising the authority necessary to implement and maintain the Center EMS (paragraph 4.1.2.4.d).
5. Establishing a Center EMS Core Team or other means able to accomplish an equivalent function with assigned roles and responsibilities (paragraph 4.1.2.4.e).
6. Periodically assessing, reviewing, and reporting on the condition of the Center EMS (paragraph 4.1.2.4.f).
7. Reporting to the Center Director and NASA Headquarters Environmental Management Division on the results of Center-led annual EMS reviews and the status and viability of the Center EMS (paragraph 6.2.5.a).
8. Reporting to the Center Director on the results of independent Self-Declaration assessments as applicable (paragraph 6.2.5.b).
9. Reviewing and updating (as necessary) Center objectives and targets (paragraph 6.2.5.c).
10. Reviewing the determination(s) of technical feasibility and economic reasonableness where it was decided not to set objectives and targets to address high priority environmental aspects (paragraph 6.2.5.d).

e. NASA Centers are responsible for --

1. Determining the applicability of this EMS to the Center's contractors, to satisfy EMS-related requirements of Executive Order 13148 (and applicable Federal Acquisition Regulations). When a determination is made that the EMS is applicable, the NASA officials responsible for the contracts shall ensure that a requirement for implementing this EMS is incorporated into all such contracts no later than the time of the next recompetition of the contracts (paragraph 1.1.d.1).
2. Determining the applicability of the EMS to the Center's tenants to satisfy EMS-related requirements of Executive Order 13148, subject to the limitations of tenancy agreements. When a determination is made that the EMS is applicable, Center Management shall ensure that EMS requirements for tenants are incorporated into future tenancy agreements (paragraph 1.1.d.2).
3. Working with the Headquarters Environmental Management Division to define the scope of the Headquarters Environmental Management System as it pertains to the Agency and Centers (paragraph 1.1.d.3).
4. Reviewing and providing comments to Headquarters Environmental Management Division on NASA environmental information, policy, requirements, and guidance (paragraph 1.1.d.4).
5. Identifying and documenting Center activities (past, present, and future), products, and services within the scope of the Center EMS (paragraph 3.1.2.3.a).
6. Identifying the environmental aspects and associated environmental impact(s) of the documented activity, product, or service (paragraph 3.1.2.3.b).
7. Applying EMS environmental aspect risk criteria (paragraph 3.1.2.3.c).
8. Periodically reviewing and updating the results of steps a. through c. of Chapter 3.1.2.3 (paragraph 3.1.2.3.d).
9. Developing, implementing, and maintaining procedures for the evaluation of legal and other requirements and proposed changes to existing legal and other requirements for applicability to Center activities and operations

- (paragraph 3.2.2.3.a).
10. Evaluating NASAwide and Center agreements and commitments (paragraph 3.2.2.3.b).
 11. Ensuring applicable legal and other requirements are available to appropriate individuals (paragraph 3.2.2.3.c).
 12. Providing information identified under step a. of Chapter 3.2.2.3 to Mission Directorates or Mission Support Offices when requested (paragraph 3.2.2.3.d).
 13. Consulting with their Office of Chief Counsel, as appropriate, in fulfilling responsibilities under Chapter 3.2 (paragraph 3.2.2.3.e).
 14. Establishing and maintaining documented Center objectives and targets consistent with high priority environmental aspects and NASA environmental policy (paragraph 3.3.2.4.a).
 15. Managing all other environmental aspects so that they do not become high priority environmental aspects. These do not require EMS defined objectives and targets (paragraph 3.3.2.4.b).
 16. Establishing and maintaining new and/or revised documented Center EMPs (paragraph 3.4.2.3).
 17. Implementing NASA environmental policy and this NPR (paragraph 4.1.2.3).
 18. Establishing and maintaining procedures for determining EMS training needs (paragraph 4.2.2.1.a).
 19. Establishing and maintaining procedures for conducting training as required at each relevant level and function of the organization (paragraph 4.2.2.1.b).
 20. Establishing and maintaining procedures for verifying and recording that the necessary EMS training has occurred (paragraph 4.2.2.1.c).
 21. Ensuring that all employees are aware of the existence of the environmental policy and its applicability to their work (paragraph 4.2.2.2).
 22. Internal communication to various organizational levels (paragraph 4.3.2.2.a).
 23. Receiving, recording, and responding to relevant communications from external parties (paragraph 4.3.2.2.b).
 24. Following existing communications procedures (or create new procedures as necessary) in communicating with internal and external parties (paragraph 4.3.2.2.c).
 25. Choosing if they will restrict external communications regarding high priority environmental aspects to within Freedom of Information Act limits, as specified by NASA at <http://www.hq.nasa.gov/office/pao/FOIA/guide.html> (paragraph 4.3.2.2.d).
 26. Documenting applicable EMS requirements within contracts no later than the time of the next recompetition (paragraph 4.3.2.2.e).
 27. Communicating applicable EMS requirements to tenants, subject to the limitations of tenancy agreements (paragraph 4.3.2.2.f).
 28. Establishing and maintaining Center EMS documentation (paragraph 4.4.2.2.a).
 29. Establishing and maintaining Center EMS document control procedures (paragraph 4.4.2.2.b).
 30. Determining if they will use established quality management system conformant document control procedures, or other filing systems for the control of EMS documents (paragraph 4.4.2.2.c).
 31. Operational controls and operational control procedures associated with high priority environmental aspects (paragraph 4.5.2.2.a).
 32. Operational controls associated with non-high priority environmental aspects, in place to prevent those environmental aspects from becoming high priority (paragraph 4.5.2.2.b).
 33. Implementing and conforming to EMS procedures (paragraph 4.5.2.2.c).
 34. Implementing emergency preparedness plans, procedures and requirements (paragraph 4.6.2).
 35. Establishing and maintaining documented procedures to track, monitor, and measure the key characteristics of operations associated with EMS objectives and targets and EMS high priority environmental aspects (paragraph 5.1.2.2).
 36. Establishing procedures to identify and track nonconformance and corrective action. Center quality management system procedures may be used (paragraph 5.2.2).
 37. For EMS records, conformance with this NPR, and applicable NASA records requirements including: NASA NPD 1440.6, NASA Records Management, NPR 1441.1, Records Retention Schedules, and NPD 2800.1 Managing Information Technology (paragraph 5.3.2.a).
 38. Retaining records of compliance activities in accordance with legal and regulatory guidelines (paragraph 5.3.2.b).
 39. Supporting Headquarters Environmental Management Division -led environmental functional reviews as necessary to ensure that Center programs, projects, facilities, systems, and operations comply with all

- environmental requirements (paragraph 5.4.2.2.a).
40. Establishing and maintaining programs and procedures for internal annual EMS reviews and internal reviews of compliance with local environmental regulations (paragraph 5.4.2.2.b).
 41. Internal, annual EMS reviews, in years that Headquarters Environmental Management Division -led environment functional reviews are not conducted (paragraph 5.4.2.2.c).
 42. At a minimum, in conducting its annual EMS reviews, each Center shall internally review all elements of its EMS for conformance with this NPR, as applicable to its internal sub-organizations, over a 3-year period (paragraph 5.4.2.2.d).
 43. Periodic internal reviews of compliance with local environmental regulations. At a minimum compliance with all applicable local environmental regulations shall be reviewed over a 3-year period (paragraph 5.2.2.2.e).
 44. If self-declaring their EMS, annual EMS reviews utilizing the current NASA Environmental Management System Checklist as it applies across the Center and to internal sub-organizations (paragraph 5.4.2.2.f.1).
 45. If self-declaring their EMS, independent self-declaration assessments every third year. The environmental management portion of a Headquarters Environmental Management Division conducted environmental functional review is a source of an independent self-declaration assessment (paragraph 5.4.2.2.f.2).
 46. Corrective actions addressing nonconformances identified as a result of evaluating and reporting of metrics (paragraph 7.2.3.a).
 47. Reporting metric results to NASA Headquarters Environmental Management Division (paragraph 7.2.3.b).

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